

An aerial photograph showing a flooded area with debris and buildings. In the top left, there is a logo for 'NATIONAL ACADEMIES' with 'Sciences', 'Engineering', and 'Medicine' listed below it. In the top center, there is a logo for 'THE GEORGE WASHINGTON UNIVERSITY' with 'WASHINGTON, DC' below it. The main title 'Community-Driven Relocation: Centering Well-Being in Climate Adaptation Strategies' is overlaid on a dark purple background. Below the title, the name 'John Ben Soileau' is listed, followed by his titles 'Visiting Scholar, REACH Center' and 'Program Officer, National Academy of Sciences', and his email address 'johnben.soileau@gwu.edu'. At the bottom, it says 'REACH Center Spring Seminar, April 7, 2025'. The background image shows a flooded area with debris and buildings, including a red-roofed building and a blue-roofed building.

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Community-Driven Relocation: Centering Well-Being in Climate Adaptation Strategies

John Ben Soileau

Visiting Scholar, REACH Center

Program Officer, National Academy of Sciences

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REACH Center Spring Seminar, April 7, 2025



Presentation Outline

1. Introduction and summary of study process and report,
Community-driven Relocation
2. Centering well-being and engagement in climate adaptation
3. Cross-sector approach & the REACH Center Initiative
4. Discussion and Q&A



Main messages

- Well-being is an essential component of individual and community health.
- The impacts of climate change compound existing stressors, reduces adaptive capacity and resilience, and compromises well-being.
- Developing a holistic understanding of community well-being and centering it in climate adaptation planning processes allow for more equitable, community-driven responses.
- Building, enhancing and sustaining well-being can be part and parcel of engaging communities in climate adaptation strategies.

National Academies: Who We Are

We marshal the energy and intellect of the nation's critical thinkers to respond to policy challenges with science, engineering, and medicine at their core



1863: President Lincoln signed a congressional charter forming the National Academy of Sciences and Art



1964: Creation of the National Academy of Engineering



1970: The National Academy of Medicine was established (former Institute of Medicine)

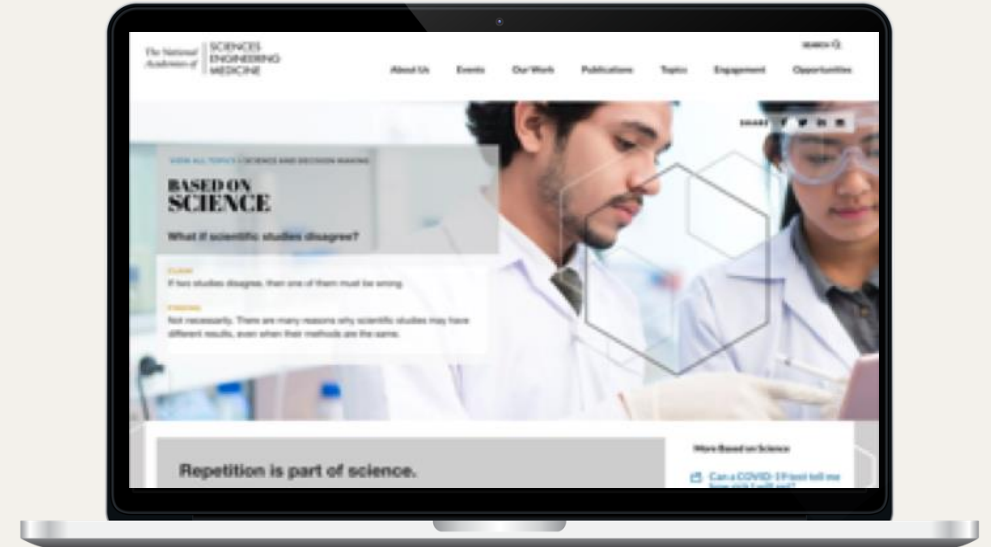
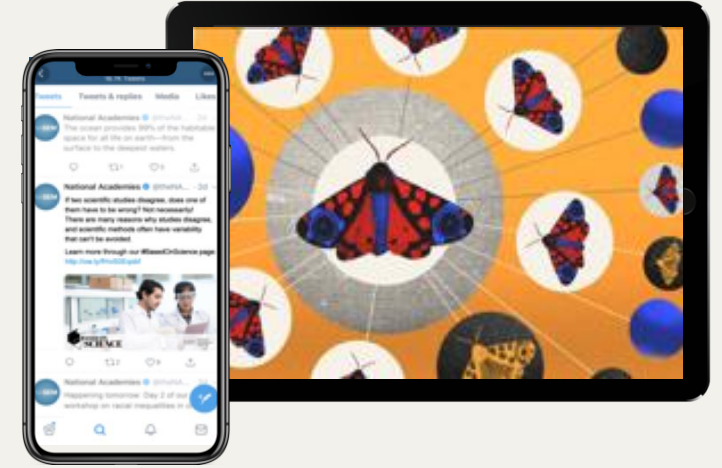
Strengths of our work:

- Stature and breadth of Academies' memberships and ability to access the nation's top experts
- "Pro bono" nature of committee service
- Independence, scientific objectivity, balance
- Quality control procedures

Products

Consensus Study Reports: the evidence-based consensus on the study's statement of task by an authoring committee of experts. Reports typically include findings, conclusions, and recommendations based on information gathered by the committee and the committee's deliberations. Each report has been subjected to a rigorous and independent peer-review process.

Proceedings: the presentations and discussions at a workshop, symposium, or other event convened by the National Academies. The statements and opinions contained in proceedings are those of the participants and are not endorsed by other participants, the planning committee, or the National Academies.



<https://www.nationalacademies.org/based-on-science>

Community-Driven Relocation

Recommendations for the
U.S. Gulf Coast Region and Beyond



Consensus Study Report

- Sponsored by the Gulf Research Program of the National Academies
- Undertaken by the Board on Environmental Change and Society (BECS) in the Division of Social and Behavioral Sciences and Education (DBASSE)
- Study period: January 2022 – April 2024
- Led by the Committee on “Managed Retreat in the U.S Gulf Coast Region”
- Consensus Study Report: *Community-driven Relocation*

Committee Membership

Janice Barnes (Co-chair)
Climate Adaptation Partners

Tracie T. Sempier (Co-chair)
Mississippi-Alabama Sea Grant Consortium

Kayode O. Atoba,
Texas A&M University

Lynn R. Goldman (NAM),
George Washington University

Gary S. Belkin,
Billion Minds Institute

E. Barrett Ristroph,
Ristroph Law, Planning, and Research

Debra M. Butler,
American Society of Adaptation Professionals

Catherine L. Ross,
Georgia Institute of Technology

Craig E. Colten,
Louisiana State University

Gavin P. Smith,
North Carolina State University

Katherine J. Curtis,
University of Wisconsin-Madison

Natalie L. Snider,
University of Maryland

Harriett Festing (*resigned December 2022*),
Anthropocene Alliance

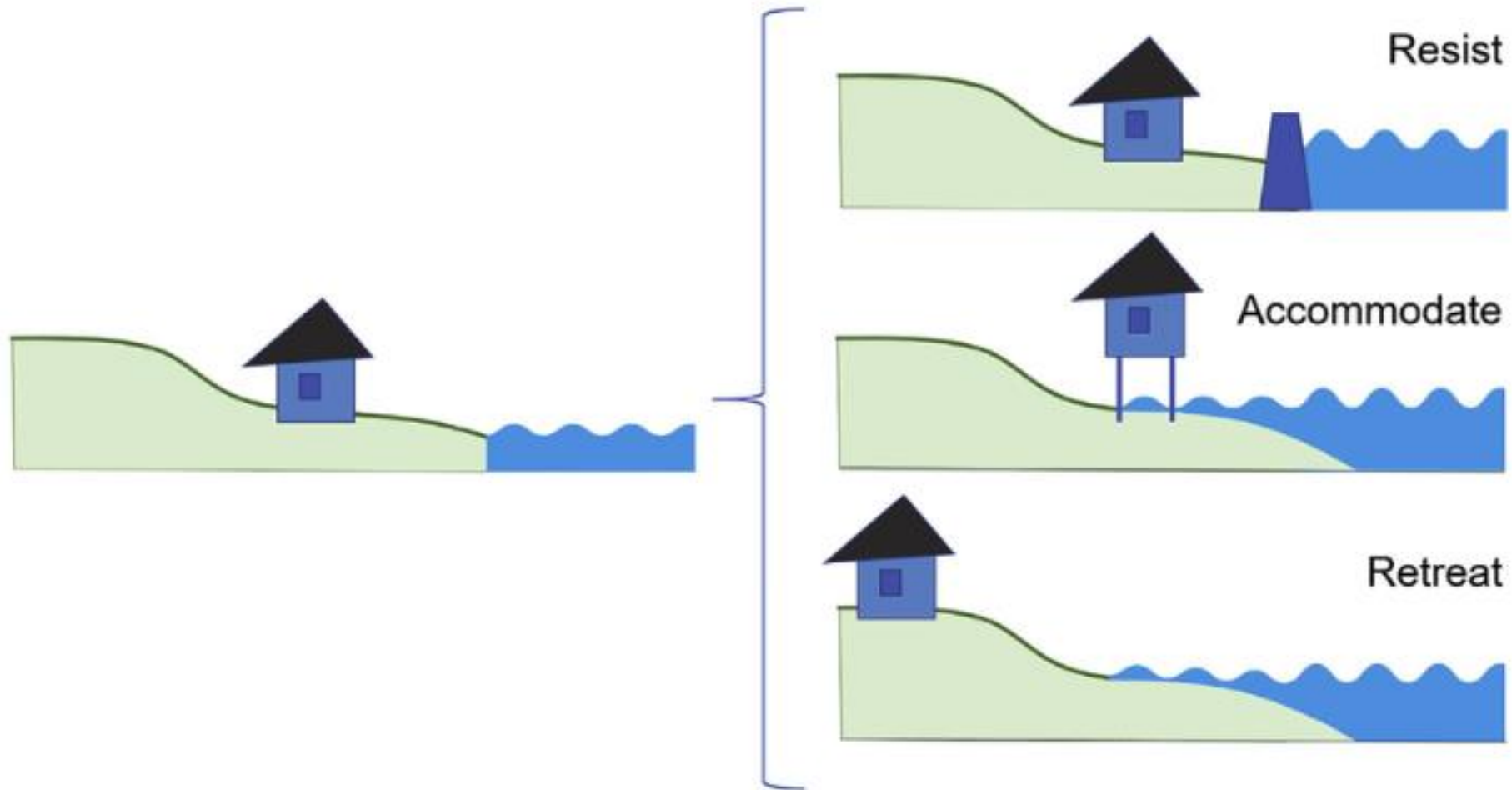
Courtney S. Thomas Tobin,
University of California-Los Angeles

Lori Hunter (*BECS Liaison*),
University of Colorado




STUDY STATEMENT OF TASK

The National Academies of Sciences, Engineering, and Medicine will convene an ad hoc committee to conduct ***a study on the movement and relocation of people, infrastructure, and communities away from environmentally high-risk areas, sometimes referred to as managed retreat, in the Gulf Coast region of the United States.*** In particular, the study will focus on understanding and responding to the unique challenges in the face of a changing climate along the Gulf Coast. The study will make findings and recommendations based on information gathered about the challenges, needs, and opportunities associated with managed retreat in the Gulf Coast region.



Adaptation Categories Unlike resistance or accommodation, managed retreat provides long-term risk reduction and potential for transformation. Resistance and accommodation measures can buy time for the thoughtful planning and social reform needed to engage in large-scale managed retreat.

Siders, A.R.. (2019). Managed Retreat in the United States. One Earth. 1. 216-225. 10.1016/j.oneear.2019.09.008.



STUDY STATEMENT OF TASK (WORKSHOP SERIES)

As one way to gather information for the report, public workshops will be held in the Gulf Coast region.

The public workshops will focus on:

- policy/practice considerations
- research/data needs, and
- community engagement strategies.

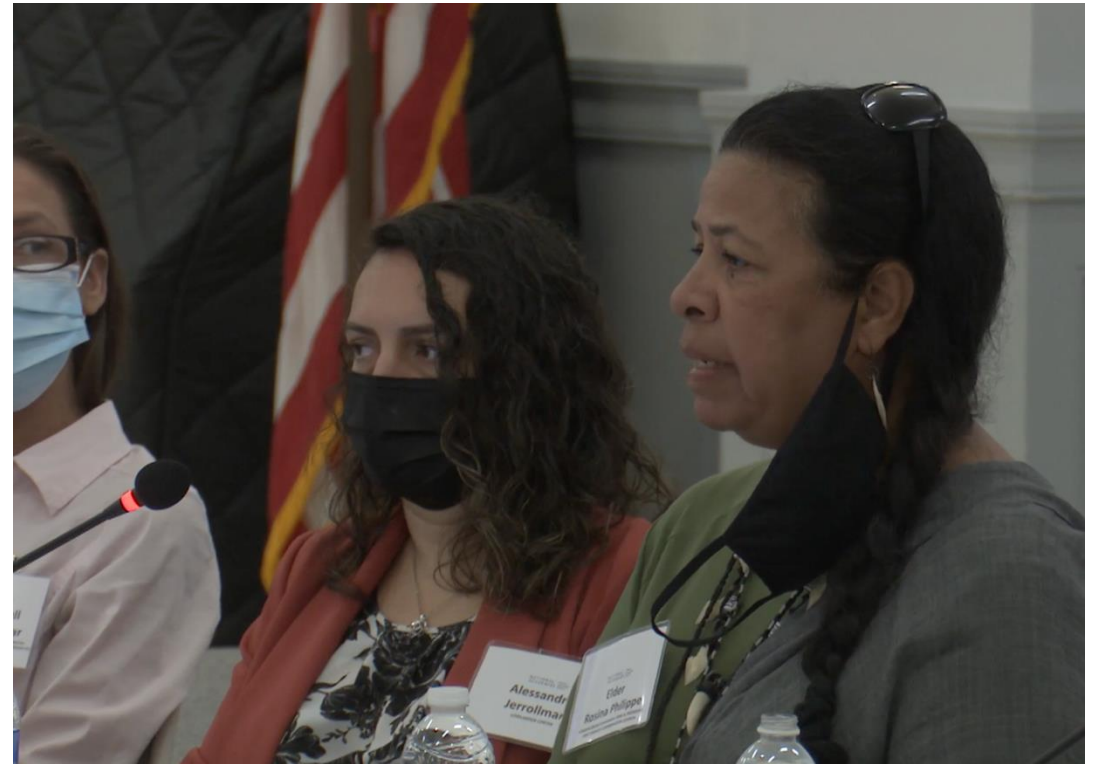
Elevating community voices will be a centerpiece of the workshops.

A map of the Gulf Coast region of the United States, including parts of Texas, Louisiana, Mississippi, Alabama, and Florida. The map highlights several locations with red markers and numbers corresponding to the list of outreach activities. A red star is placed over Mobile, Alabama. The list of activities is overlaid on a semi-transparent white box in the center of the map.

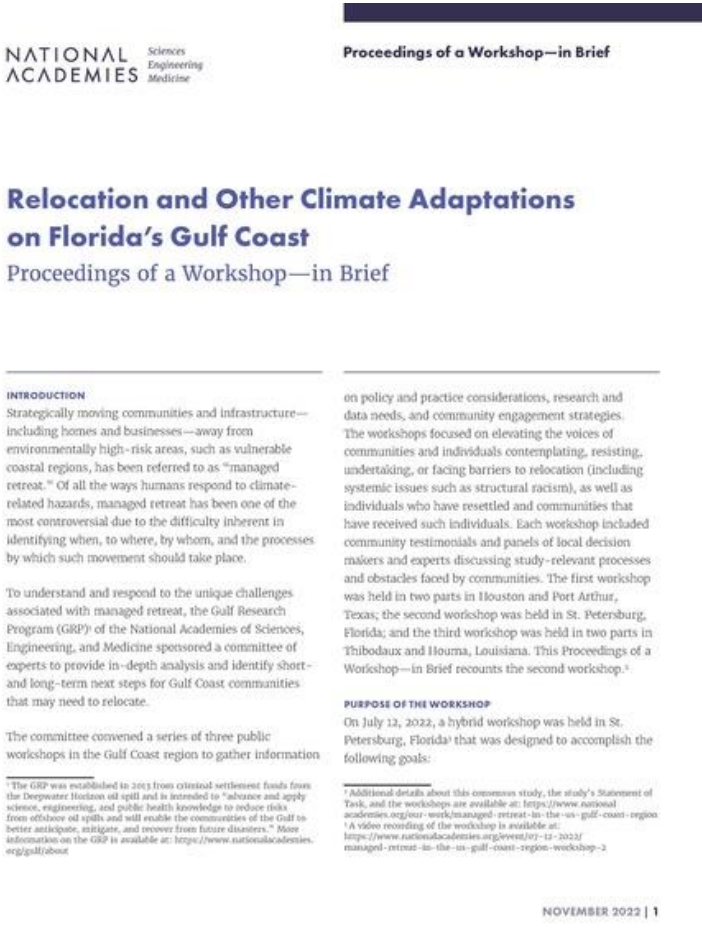
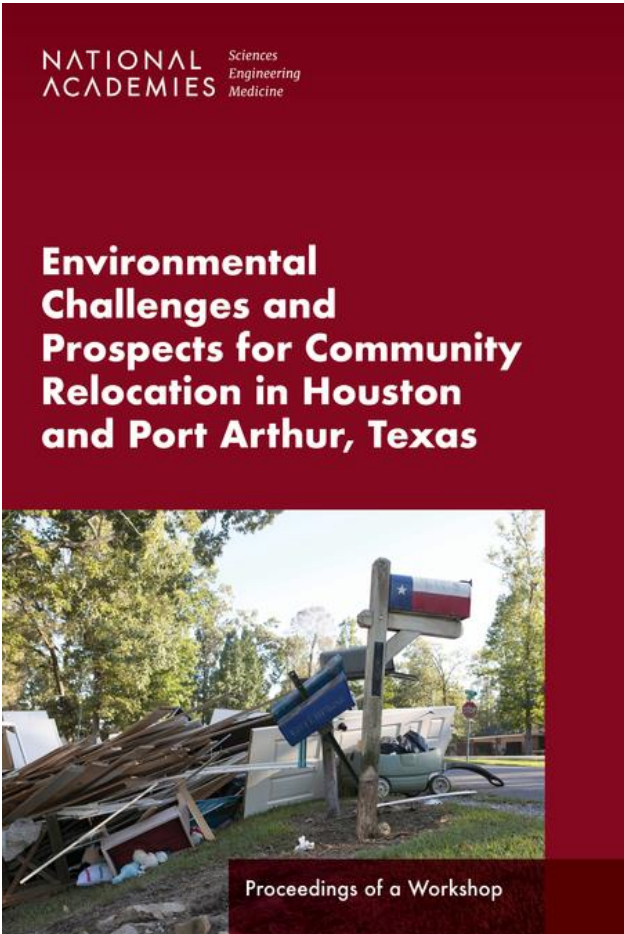
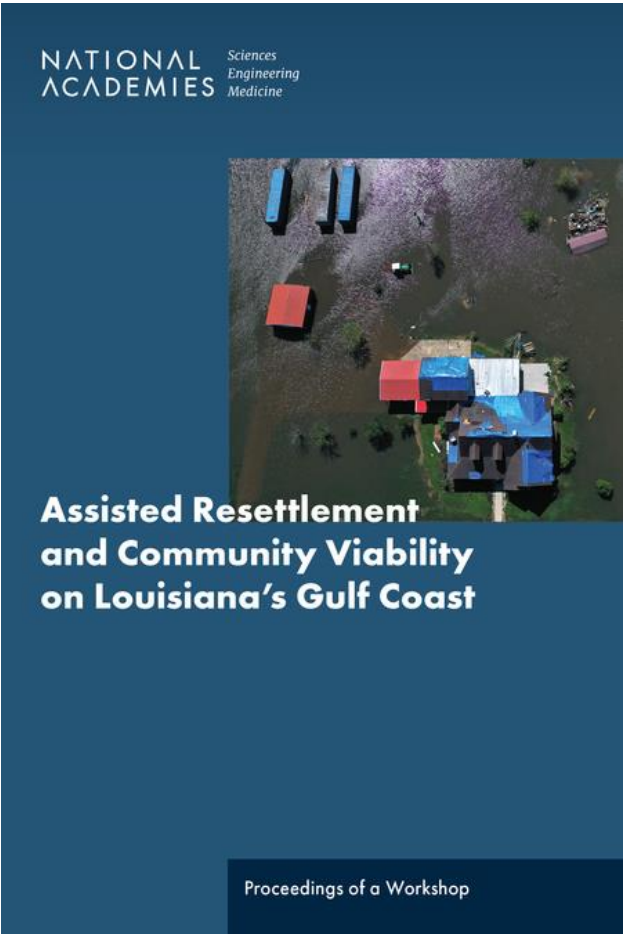
Committee Outreach Activities

1. Hybrid workshops in **Houston and Port Arthur, TX**, June 2022
2. Hybrid workshop in **Saint Petersburg, FL**, July 2022
3. Hybrid workshops in **Thibodaux and Houma, LA**, July 2022
4. Virtual Roundtable—**Gulf-wide and Beyond**, Perspectives and Approaches to Property Acquisitions: Challenges and Lessons Learned, December 2022
5. Virtual Focused Discussion—**Mississippi and Alabama Gulf Coast Community Stakeholder Perspectives** on Managed Retreat, March 2023
6. Public Call for Perspectives: Managed Retreat in the U.S. Gulf Coast Region, online submission **open to the public** from September 26–December 15, 2022.

Workshops



Workshop Proceedings



Structure of the Report

PART 1: INTRODUCING COMMUNITY-DRIVEN RELOCATION

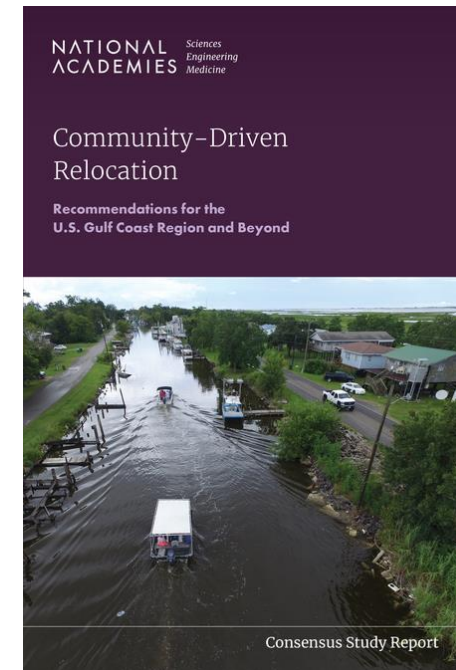
1. Introduction
2. The Scale of the Threat
3. Examples of Relocation

PART 2: UNDERSTANDING RELOCATION IN THE GULF REGION

4. Understanding the Gulf Region: Historical Context
5. Current Realities of the Gulf Coast
6. Sustaining Community Well-being: Physical, Mental, and Social Health
7. Communication, Participation, and Knowledge
8. Considerations for Receiving and Originating Communities

PART 3: POLICY, FUNDING, and PLANNING

9. Landscape of Policy, Funding, and Planning
10. Challenges and Opportunities for Policy
11. Recommendations for Community-Driven Relocation Efforts in the Gulf Region and Beyond



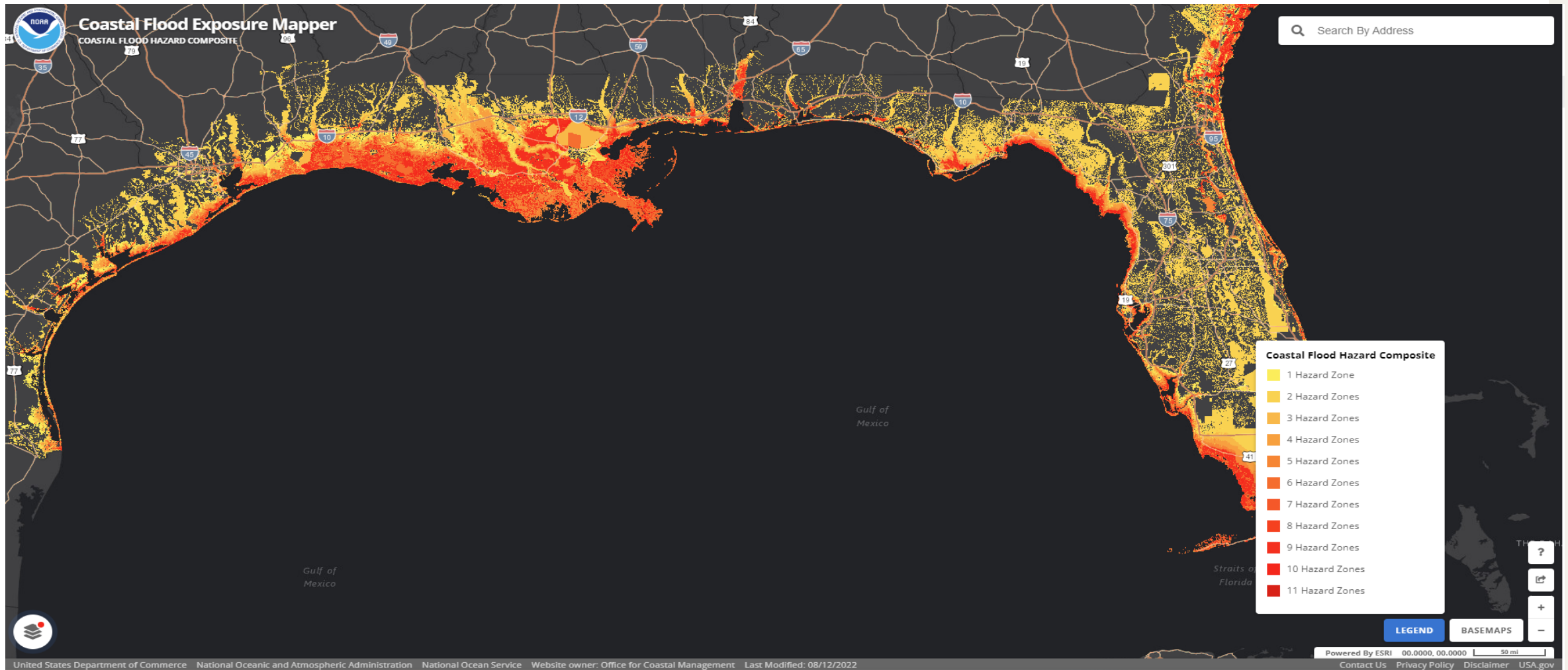
“Community-driven Relocation”

The committee recognized the importance of shared decision-making in any policy-supported and institutionalized process of community-driven relocation, meaning:

- The originating community is at the center of decision-making about relocation and needs for well-being;
- policy and material supports are provided for optimally enlarging a community’s option for a safe landing in the receiving community or relocation destination; and
- supports are provided for the receiving community, including land use planning, economic investments and social resilience

CHAPTER 2

The Scale of the Threat



Gulf Coast Coastal Flood Hazard Composite

SOURCE: Office for Coastal Management. (2023b). Coastal Flood Exposure Mapper: Gulf of Mexico. <https://coast.noaa.gov/floodexposure/#-9725012,3188145,7z/eyJiljoiZGFyayJ9>

Case Studies of Relocation

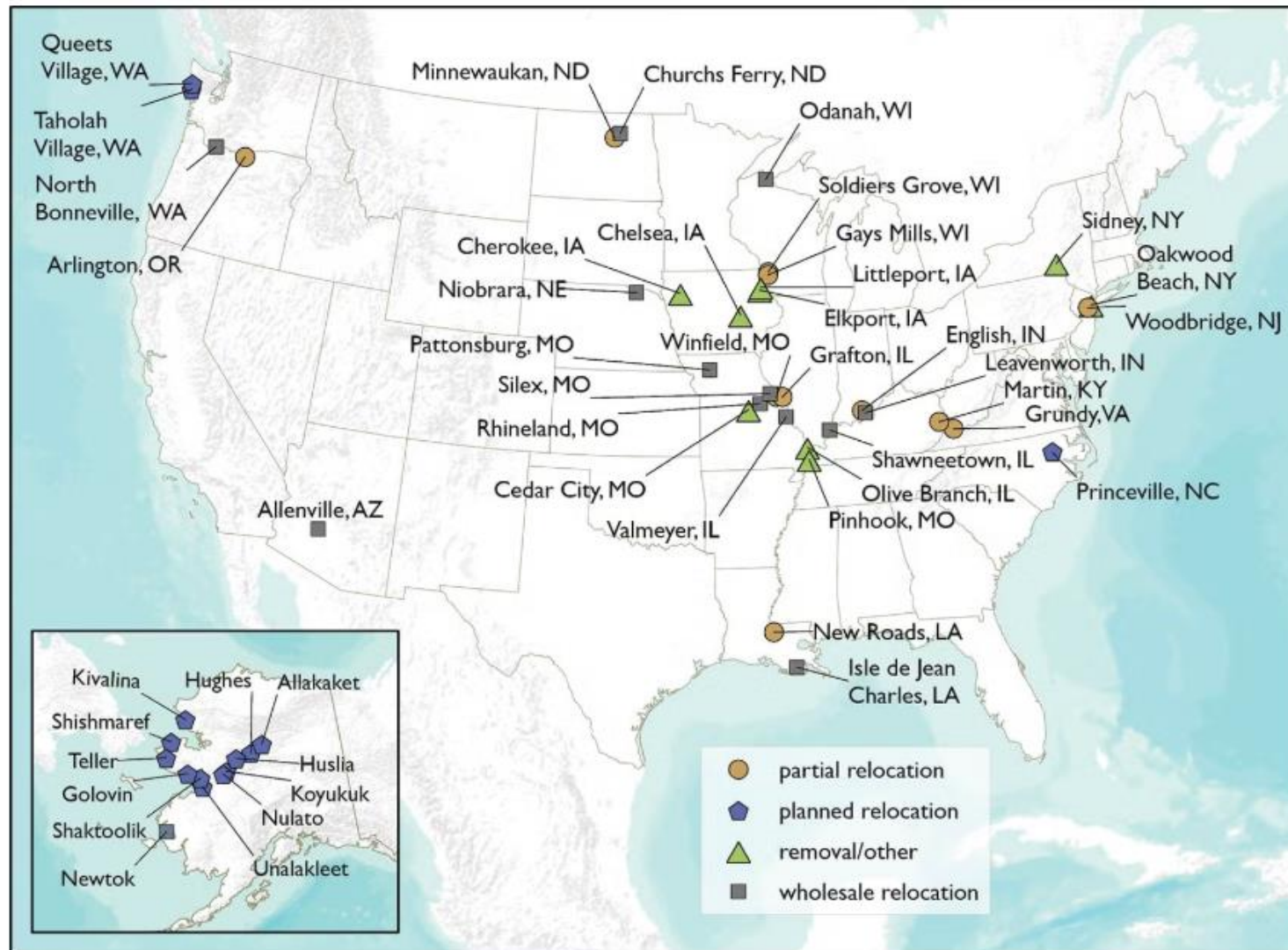


Figure 1. Managed Retreat Locations in the United States

Managed Retreat and Community Relocation in the United States due to Inundation and Related Hazards along Rivers and Coastlines, 1881 - 2021.

SOURCE: Pinter, Nicholas.

“True Stories of Managed Retreat From Rising Waters.” *Issues in Science and Technology* 37, no. 4 (Summer 2021): 64–73.

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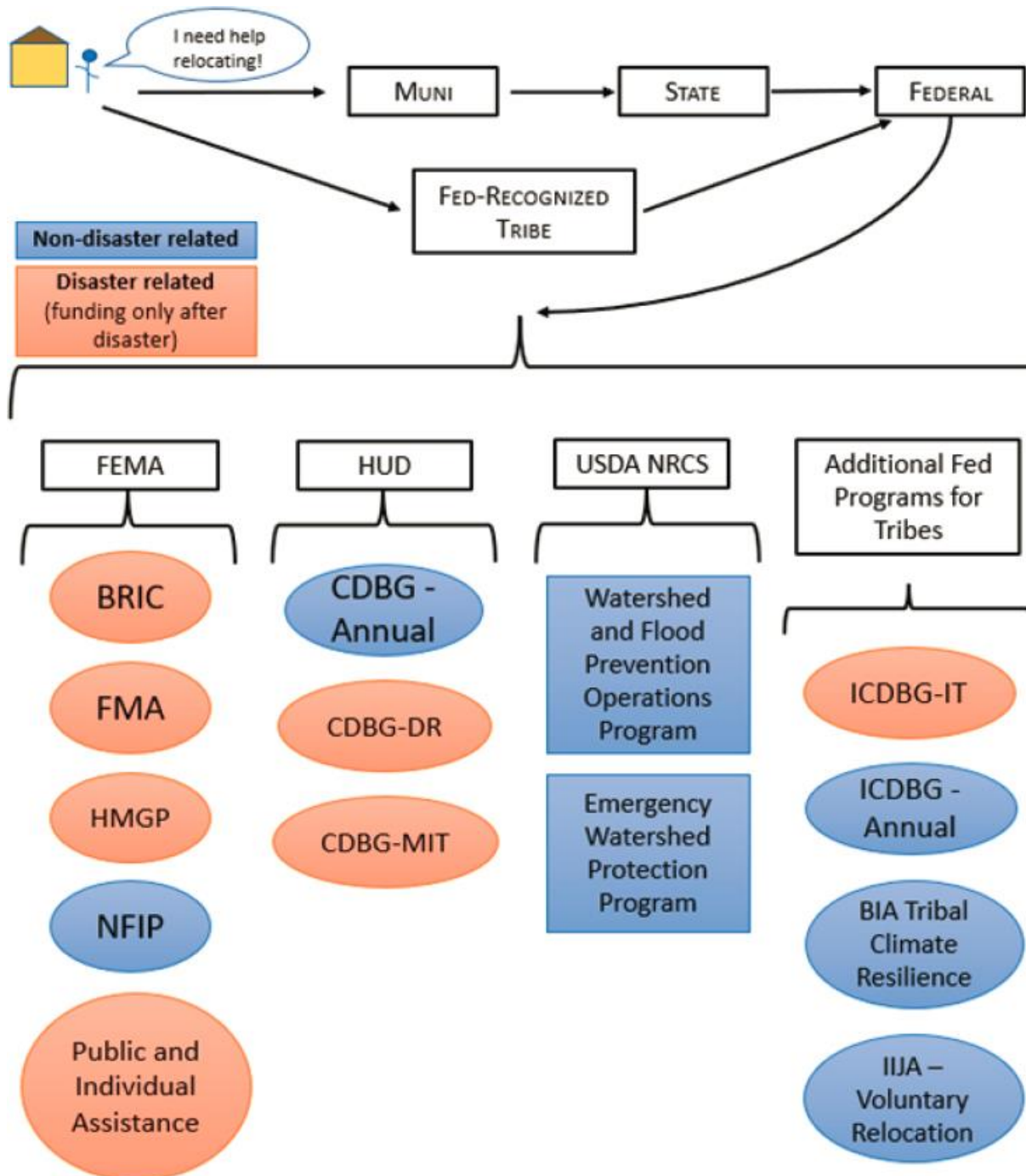
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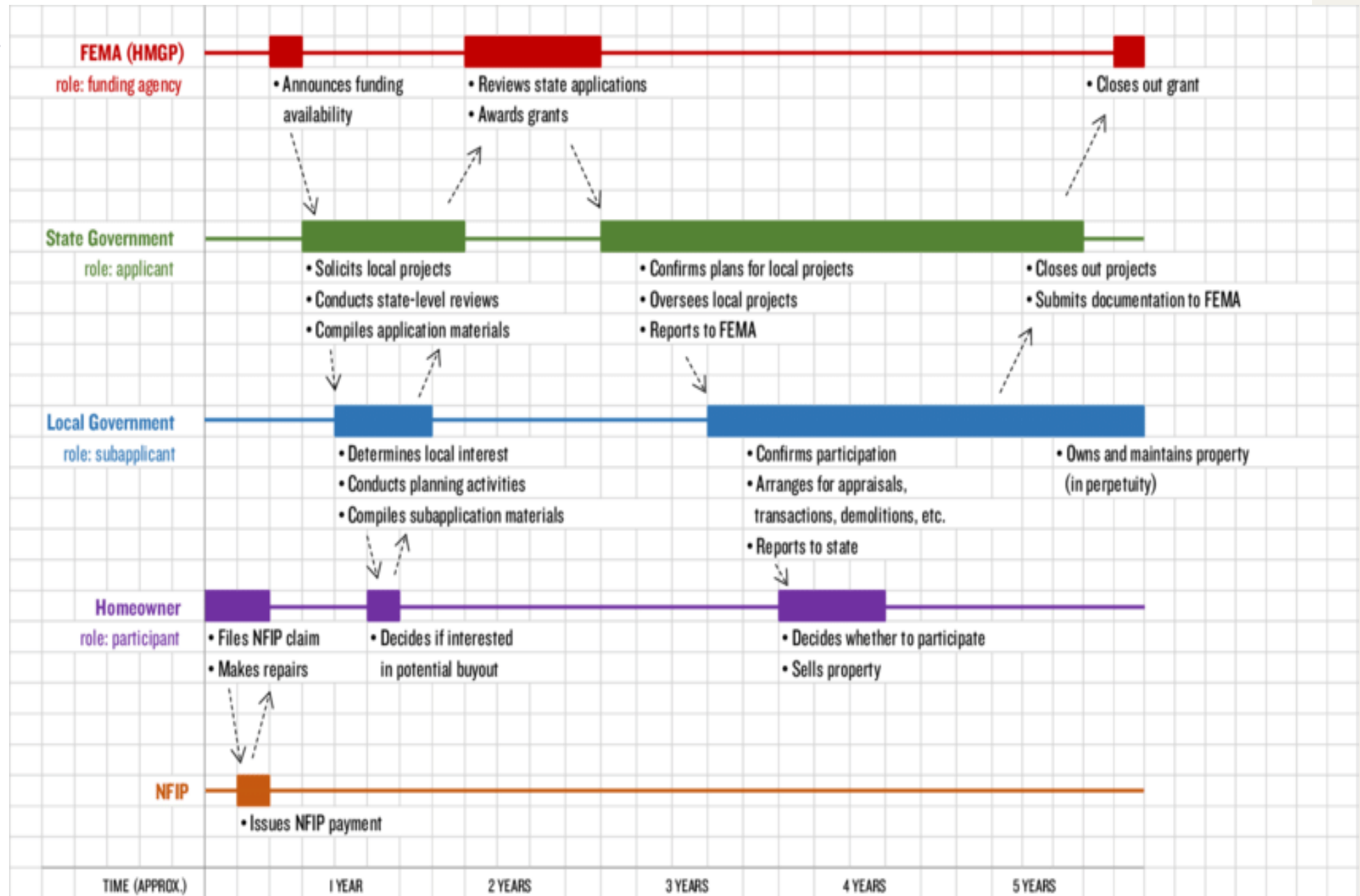


Sources of federal government support for relocation

Municipality (Muni); Federal Emergency Management Agency (FEMA); Building Resilient Infrastructure and Communities (BRIC); Flood Mitigation Assistance grant program (FMA); Hazard Mitigation Grant Program (HMGP); National Flood Insurance Program (NFIP); Department of Housing and Urban Development (HUD); Community Development Block Grant (CDBG); CDBG Disaster Recovery (CDBG-DR); CDBG Mitigation (CDBG-MIT); U.S. Department of Agriculture Natural, Resources Conservation Service (USDA NRCS); Indian Community Development Block Grant (ICDBG); ICDBG Imminent Threat (ICDBG-IT); Bureau of Indian Affairs (BIA); Infrastructure Investment and Jobs Act (IIJA).

Blueprint for FEMA Funded Buyouts

SOURCE: Weber, A., & Moore, R. 2019. Going Under: Long Wait Times for Post-Flood Buyouts Leave Homeowners Underwater. Natural Resources Defense Council. <https://www.nrdc.org/resources/going-under-long-wait-times-post-flood-buyouts-leave-homeowners-underwater>. Reprinted with permission from NRDC.



Recommendations for the Gulf Region and Beyond

- **Centering Well-Being (Recommendation 1)**

- This domain addresses **the inherent interconnections between community resilience, climate adaptation, and individual and community well-being**. Addressing the traumas, stressors, and dearth of resources, and **enhancing individual and collective efficacy** are all critical prerequisites to providing a foundation for communities to participate in community-driven relocation projects equitably and effectively. **Bolstering individual and organizational capacity** for well-being in climate-threatened communities are priorities for public health and climate adaptation across the nation.

- **Developing and Sustaining Local Collaborations (Recommendations 2-7)**

- **Communication, participation, and engagement are critical elements** that need fostering and enhancing among communities at risk/originating communities, receiving communities, government, and other groups whose participation is necessary to the relocation process. **Collaboration in support of community-driven relocation necessitates better integration with ongoing planning efforts** at federal, state, regional, and local levels, as well as purposeful capacity building for originating and receiving communities.

- **Strengthening Preparations for Community-Driven Relocation (Recommendations 8-13)**

- **Strengthening federal agency preparations** include the establishment of hazard mitigation “navigators,” and community resilience/adaptation extension agents, deepening local capacities, improving acquisition payments, reassessing benefit cost analysis (BCA) processes, and **streamlining funding and interagency collaborations**.

Centering well-being and effective engagement in climate adaptation

Well-being: a holistic approach

- The World Health Organization (1946) defined well-being as “a state of complete physical, social and mental well-being and not merely the absence of disease and infirmity.”
- The study broadly defined it as *how people feel* and *how they function physically, socially, and psychologically*:
 - **Physical well-being** as maintaining a healthy life- style, access to health care, regular sleep, eating well, adequate housing, exercise, and avoiding exposure to harmful substances
 - **Social well-being** as social connectedness, “the degree to which individuals or groups of individuals have and perceive a desired number, quality, and diversity of relationships that create a sense of belonging and being cared for, valued, and supported”
 - **Psychological well-being** as several aspects of health-related quality of life, thriving, and several psychological dimensions, including positive emotions and moods (e.g., happiness); the relative absence of negative emotions, moods, and states (e.g., stress, sadness, loneliness); life satisfaction; sense of meaning and purpose; quality of life; and satisfaction with other life domains (e.g., work satisfaction, satisfaction with relationships)

Building Resilience Against Climate Effects (BRACE)

The Center for Disease Control and Prevention's (CDC) Framework, Building Resilience Against Climate Effects (BRACE).

SOURCE: Center for Disease Control and Prevention (CDC). 2022. CDC's Building Resilience Against Climate Effects (BRACE) Framework.

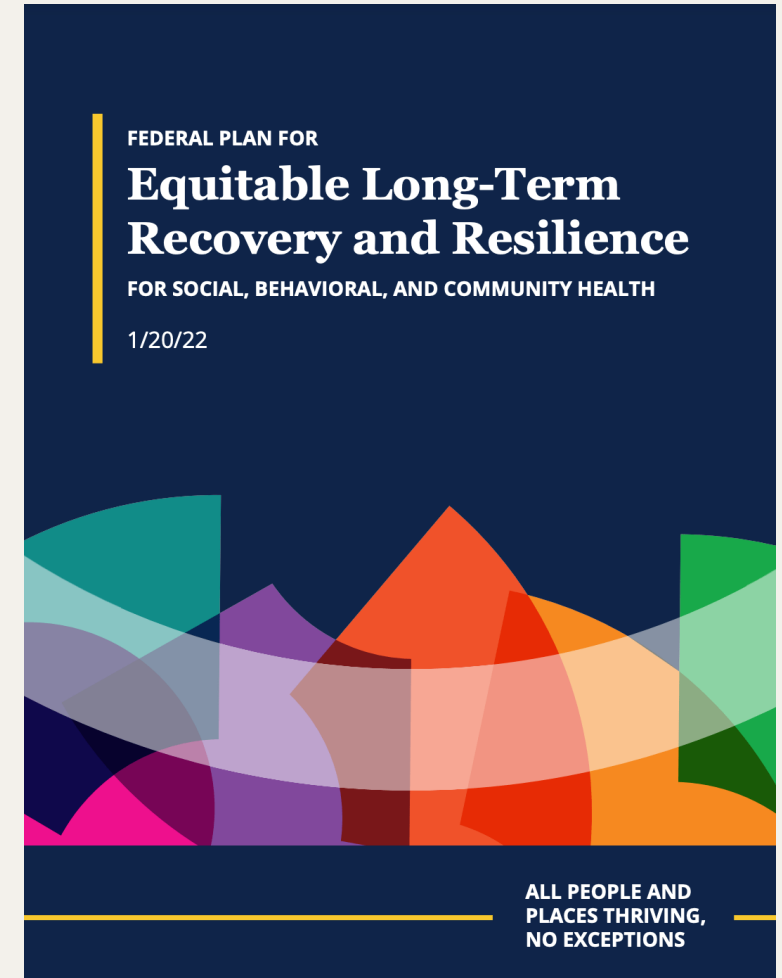
<https://www.cdc.gov/climateandhealth/BRACE.htm>



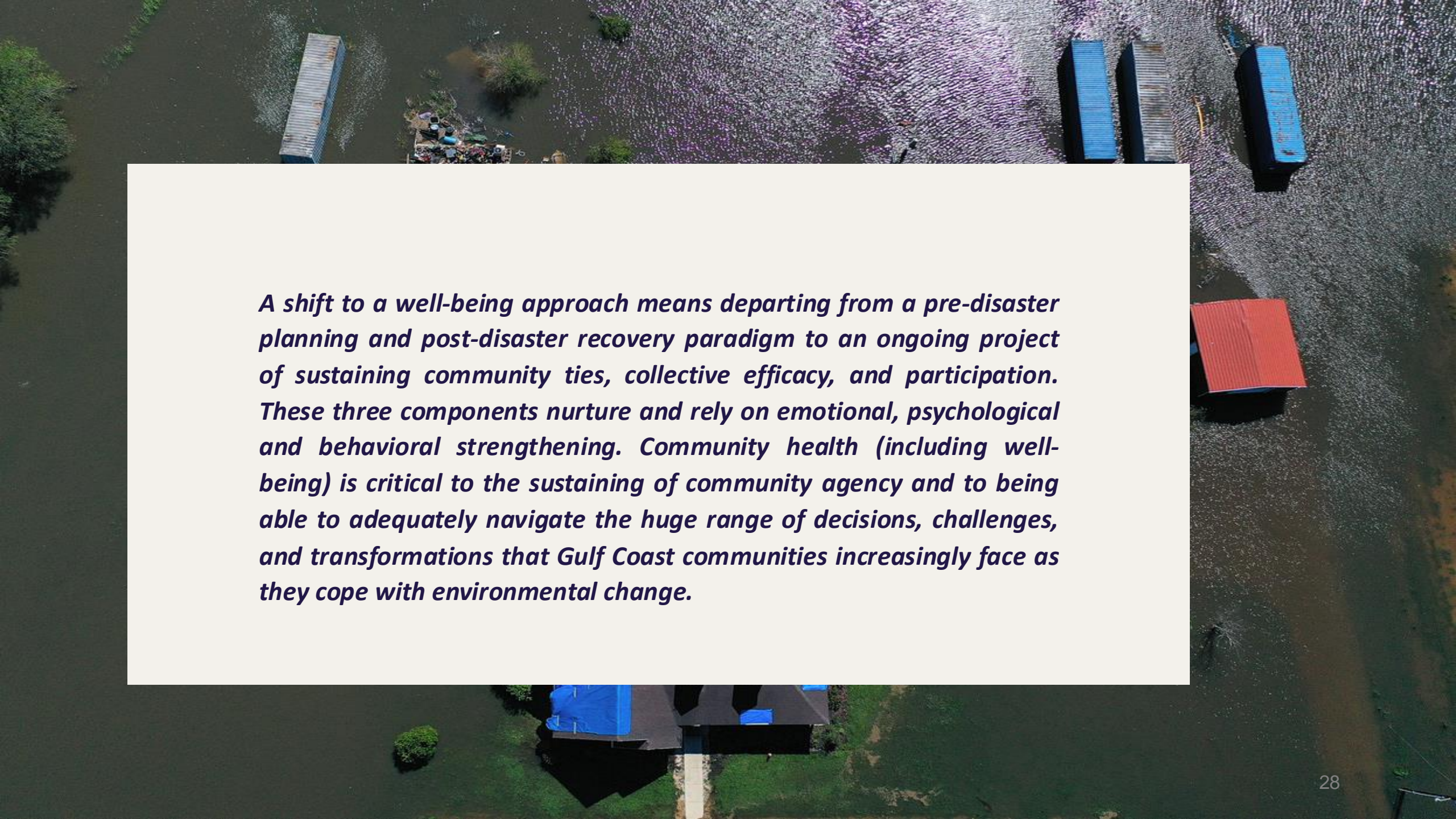
Vital conditions of well-being & the ELTRR



Well-Being In The Nation: The WIN Network



US Dept. of Health & Human Services-led Federal Plan for Equitable Long-Term Recovery and Resilience (ELTRR)(2022)

An aerial photograph showing a flooded area. In the upper half, there is a large pile of debris, including what looks like a boat or a large piece of machinery, surrounded by water. Several blue and red metal containers or trailers are scattered around the debris. In the lower half, there is a house with a blue tarp covering part of its roof, situated in a grassy area that appears to be partially submerged. The water is dark and murky.

A shift to a well-being approach means departing from a pre-disaster planning and post-disaster recovery paradigm to an ongoing project of sustaining community ties, collective efficacy, and participation. These three components nurture and rely on emotional, psychological and behavioral strengthening. Community health (including well-being) is critical to the sustaining of community agency and to being able to adequately navigate the huge range of decisions, challenges, and transformations that Gulf Coast communities increasingly face as they cope with environmental change.

Belonging and Civic Muscle

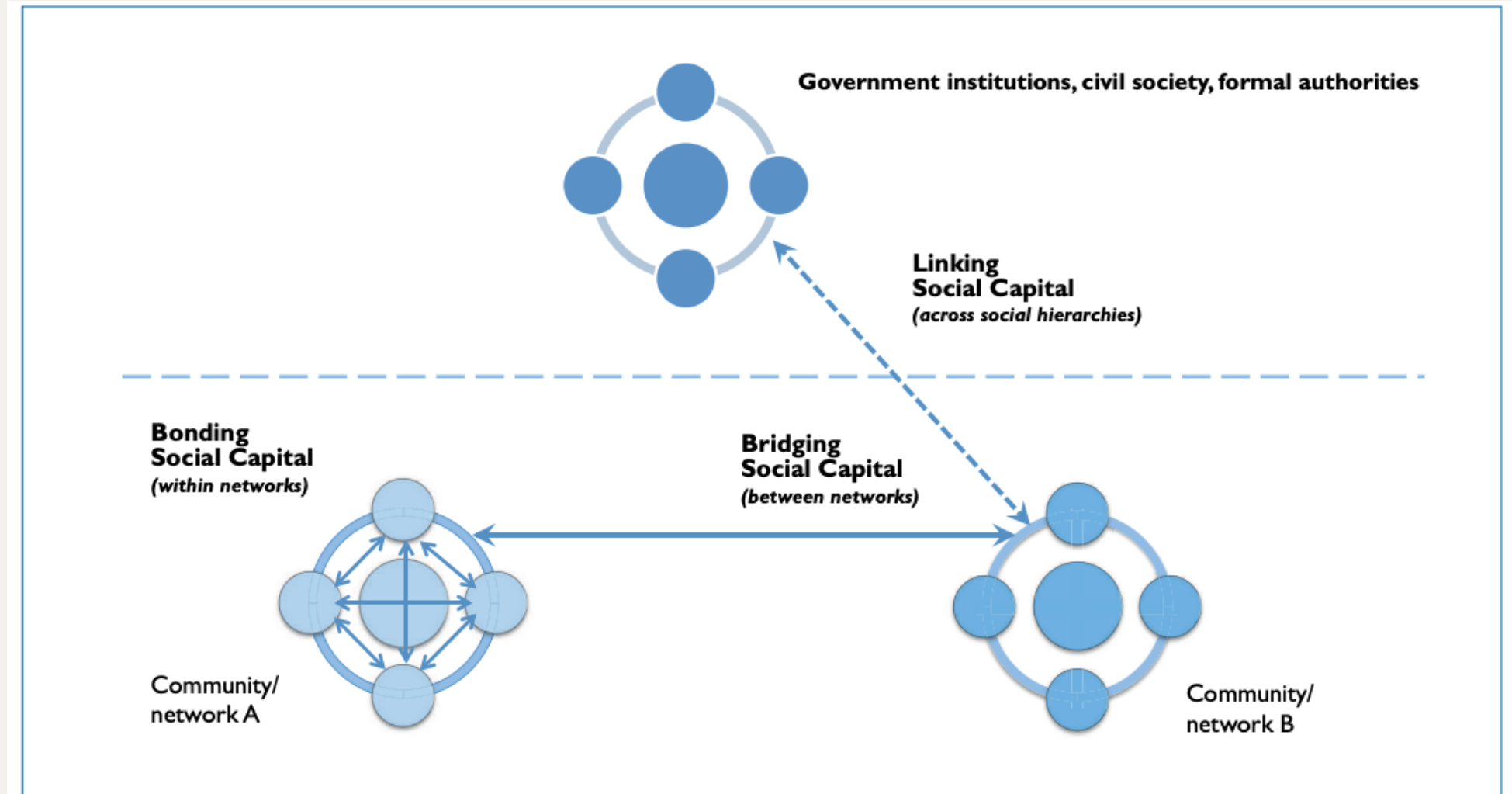


Belonging: The extent to which **individuals feel valued, connected, respected, and supported within their community**; emphasizes inclusion, trust, empathy, and relationships that **foster social cohesion**, making individuals feel welcomed and recognized as essential members of society

Civic Muscle: The **collective capacity** of individuals and communities **to actively engage**, collaborate, advocate, and participate **in civic life**; highlights the power and ability of communities to come together, solve problems, shape decisions, **and influence policies** that directly impact their well-being.

Social Capital: Features of social organization, such as networks, norms, and trust, **that facilitate coordination and cooperation for mutual benefit**

Social Capital: Bonding, Bridging & Linking



SOURCE: Aldrich, D. P. 2012. *Building Resilience: Social Capital in Post-Disaster Recovery*. University of Chicago Press.

LA-SAFE: Strategic Adaptations for Future Environments

- Develop a **holistic and accessible approach to risk communication**; opportunities for communities to use visual aids to **ground truth what they had seen and experienced** in their own lives.
- Clearly communicate to the public the need and opportunity to **augment pre-acquired data and science with locally sourced experiential knowledge**.
- Developing **consistent terminology** and taking time to teach this terminology
- Establish **structured processes** across jurisdictions and networks.
- **Collaborate** with existing local organizations and **provide training opportunities**.
- Meetings were structured to encourage and facilitate multiscalar thinking, alternating between meetings designed to create **a future vision for the region and individual parishes and communities**



Task-sharing

Task sharing is about drawing on the current capabilities of different groups, such as community-based organizations (CBOs), mental health practitioners (MHPs), and lay community leaders and CBO clients, but also committing to building new capacities through collaborations and the co-implementation of well-being services.

Capabilities Leveraged in a Task Sharing Approach

CBO

Engage community members in trusted relationships

Address various types of life challenges and social determinants (e.g., housing, employment, education)

Help clients navigate social service or legal systems

Strengthen community ties and networks

Gather data and promote local voice to identify social needs, goals, and strategies

Develop and deliver culturally responsive approaches to improve social outcomes, which may include trauma-informed approaches

MHP

Identify and help people understand specific mental health issues

Provide specialized clinical care, including therapy and/or medication

Provide specialized training and supervision in mental health skills

Apply clinical expertise to design, test, implement, or improve approaches to clinical care

Gather data about mental health needs and goals and develop strategies to improve mental health outcomes

CBO Clients & Community

Identify community needs and priorities related to mental health and social outcomes

Identify trusted community resources

Provide input to design and improve services and support

Help generate responsive solutions to community history and culture

Offer social support

Take action to improve individual or community mental health and well-being

SOURCE: Stevens, C., Tosatti, E., Ayer, L., Barnes-Proby, D., Belkin, G., Lieff, S., & Martineau, M. 2020. *Helpers in Plain Sight: A Guide to Implementing Mental Health Task Sharing in Community-Based Organizations*. RAND Corporation.

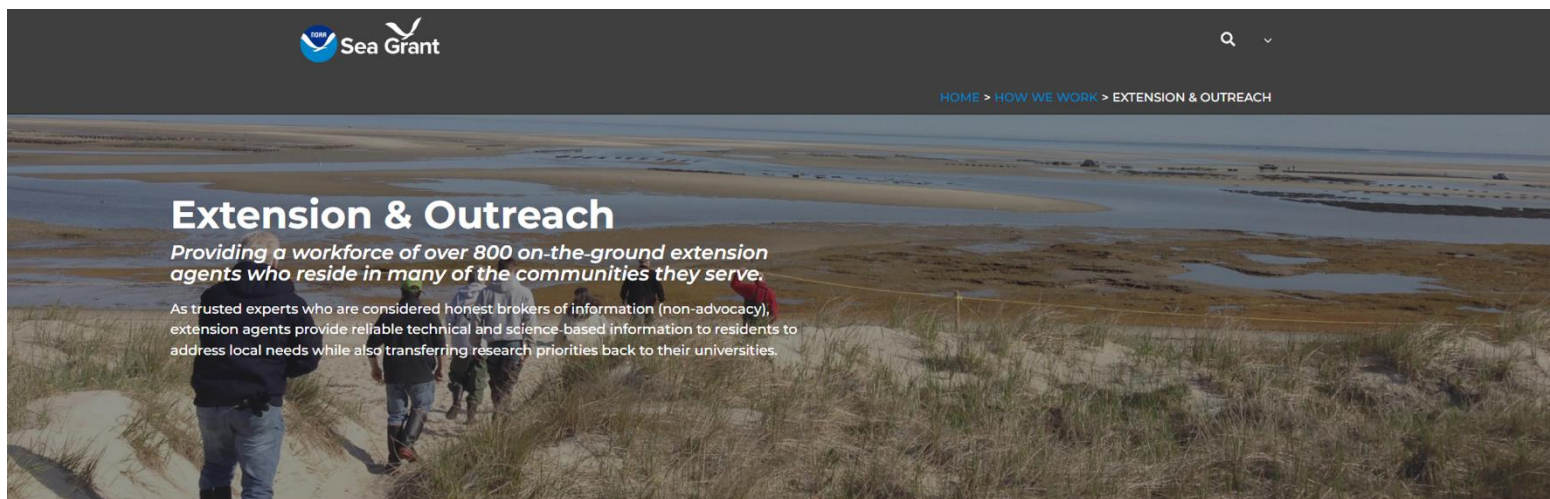
<https://www.rand.org/pubs/tools/TL317.html>

Recommendations for Centering Well-Being

Recommendation 1: The U.S. Department of Health and Human Services (HHS) Office of Climate Change and Health Equity (OCCHE) and Office of the Assistant Secretary for Mental Health and Substance Use should support and coordinate efforts across HHS and other agencies with the following objectives:

- **Accelerate adoption of task-shared approaches to community mental health care**, especially in high-climate impacted areas (e.g., through establishment of payment mechanisms, such as assistance from the Health Resources and Services Administration (HRSA) and scope expansion of Certified Community Behavioral Health Clinics (CCBHCs)). Such approaches should use evidence-supported mental health care, prevention, and promotion methods that community members and community-based organizations can adopt and directly provide.
- **Facilitate collaborations among federal agencies, programs, and policies that promote well-being** and build community capacity to support mental health, effective empowerment, trust, inclusion, equity, and collective efficacy for adapting to environmental challenges.

Climate Adaptation Extension Agents / Hazard Mitigation Navigators



Connecting Resource Networks

Extension agents connect university resources and expertise with local communities.

[LEARN ABOUT EXTENSION LIAISONS](#)

[LEARN ABOUT LEGAL RESEARCH & EXTENSION](#)



Recommendations for Strengthening Preparations for Community-Driven Relocation

Recommendation 9: In the short-term, federal agencies (e.g., Federal Emergency Management Agency (FEMA), United States Army Corps of Engineers (USACE), Department of Housing and Urban Development (HUD), etc.) **should fund application and implementation assistance through the establishment of hazard mitigation “navigators.”**

The funding and implementation of navigators should be a part of long-term recovery plans and hazard mitigation plans. These “navigators” would:

- provide the technical assistance needed to help communities apply for and implement a relocation strategy (e.g., through collective buyout programs); and
- provide household- and neighborhood-level planning assistance throughout the relocation process.

REACH

*Research and Engagement for Action on
Climate and Health (REACH) Center*

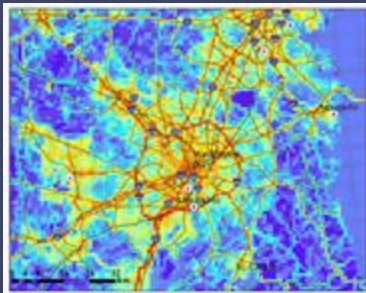
A multi-institutional exploratory center funded by the National Institute for Environmental Health Sciences (NIEHS) that aims to...

Research

Co-generation



Geospatial
Datasets



*BRIDGE BIG DATA TO CLIMATE SOLUTIONS THAT
ADVANCE HEALTH AND ENVIRONMENTAL JUSTICE*

Climate Solutions



Health +
Environmental Justice



Center Cores

Administrative

**Leadership, funding and
governance of the
Center**

Developmental

**Developing and fostering
new research through
pilot grants and
educational opportunities**

Community Engagement

**Catalyzing collaboration
between community
groups and academic
research**

Exposure Assessment

**Building capacity for use of
geospatial climate and
environmental datasets
with health datasets**

How are we achieving our mission?



Pilot Grant Funding and Student Fellowships



Climate data support

Climate and health
data set
identification

Data
consultation
services



Offer networking, educational, and training opportunities

NIH Grant
Application
training

Climate and
Health Seminars



Catalyzing collaborative research with the community

co-creation of
research projects

Community
Engagement and
research translation

An aerial photograph showing a flooded area with debris and buildings. In the top left, there is a pile of debris including a wooden crate and some trash. To the right, there are three blue shipping containers. Further down, there are two red-roofed buildings. The water is dark and murky, and the overall scene suggests a disaster or flood impact.

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Thank you!

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Program Officer, National Academy of Sciences

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